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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/511,445	02/22/2000	William J. Gordon-Kamm	1115	1983

7590 12/30/2002  
Pioneer Hi-Bred International Inc  
Corporate Intellectual Property  
7100 NW 62nd Avenue  
PO Box 1000  
Johnston, IA 50131-1000

EXAMINER

COLLINS, CYNTHIA E

ART UNIT PAPER NUMBER

1638

DATE MAILED: 12/30/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/511,445

Applicant(s)

GORDON-KAMM ET AL.

Examiner

Cynthia Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 11 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3,5,6 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5,6 and 9-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 20.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The Request for Reconsideration filed October 11, 2002, paper no.19, has been entered.

Claims 3, 5-6 and 9-17 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

All previous objections and rejections not set forth below have been withdrawn.

### ***Information Disclosure Statement***

An initialed and dated copy of Applicant's IDS form 1449, filed October 11, 2002, Paper No. 20, is attached to the instant Office action.

### ***Claim Rejections - 35 USC § 112***

Claims 5, 10-14 and 15-17 remain rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, for the reasons of record set forth in the office action mailed July 15, 2002.

Applicant's arguments filed October 11, 2002, have been fully considered but they are not persuasive.

Applicant points out that page 5 of the specification discloses various suitable geminiviruses useful in increasing endoreduplication and yield. Applicant argues that while the specification presents working examples for wheat dwarf virus Rep A, there is no legal

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requirement to provide any working examples. Applicant also points to page 4 of the specification where viral replicase polynucleotides are defined as polynucleotides that express polypeptides that exhibit an Rb binding function, said Rb binding function being involved in increasing endoreduplication and yield in a plant (reply pages 2-3).

While page 5 of the specification recites various geminiviruses that are known in the art, with the exception of wheat dwarf virus, neither the specification nor the prior art has characterized these viruses as being useful in increasing endoreduplication and yield. Furthermore, while there is no legal requirement to provide any working examples, working examples are one means by which Applicant may provide evidence of function in an area of technology known to be unpredictable. Finally, Applicant has not characterized Rb binding function per se as being involved in increasing endoreduplication and yield in a plant.

Claims 3, 5-6 and 9-17 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for methods for increasing endoreduplication and crop yield by stably transforming a plant with an isolated wheat dwarf virus RepA geminivirus replicase polynucleotide, does not reasonably provide enablement for methods for increasing endoreduplication and crop yield by stably transforming a plant with an isolated plant geminivirus replicase polynucleotide, for the reasons of record set forth in the office action mailed July 15, 2002.

Applicant's arguments filed October 11, 2002, have been fully considered but they are not persuasive.

Applicant argues that the application discloses a variety of geminiviruses replicases suitable for increasing endoreduplication and yield in a plant, and that the specification provides a working example and a reasoned analysis for the suitability of said geminiviruses. replicases. With respect to the cited reference of Hanley-Bowdoin et al., Applicant points out that show no evidence to support their conclusion that AL1 does not significantly alter growth and development of plant cells (reply page 4).

While the specification discloses a variety of geminivirus replicases known in the art, with the exception of wheat dwarf virus, neither the specification nor the prior art has characterized these viruses as being useful in increasing endoreduplication and yield. With respect to the cited reference of Hanley-Bowdoin et al., the assertion by Hanley-Bowdoin et al. that transgenic tobacco plants expressing the tomato golden mosaic virus geminivirus replicase are phenotypically normal is considered to be evidence that AL1 does not significantly alter growth and development of plant cells in the absence of evidence to the contrary.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Remarks***

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (703) 605-1210. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

CC  
December 26, 2002

  
**ELIZABETH F. McELWAIN**  
**PRIMARY EXAMINER**  
**GROUP 1600**